

#### UNITED STATES PATENT AND TRADEMARK OFFICE



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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/757,909 01/10/2001 Steven W. Arms 1024-035 8315 26542 04/10/2003 7590 JAMES MARC LEAS **EXAMINER** 37 BUTLER DRIVE TUGBANG, ANTHONY D S. BURLINGTON, VT 05403 ART UNIT PAPER NUMBER

Please find below and/or attached an Office communication concerning this application or proceeding.

•		D`
·	Application No.	Applicant(s)
Office Action Summary	09/757,909	ARMS ET AL.
	Examiner	Art Unit
	Dexter Tugbang	3729
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the application to become ABANDON to the course the application to become ABANDON.	imely filed  ays will be considered timely.  the mailing date of this communication.  ED (35 U.S.C. § 133).
1)⊠ Responsive to communication(s) filed on <u>03 J</u>	lanuarv 2003 .	
· <u> </u>	is action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims		
4)⊠ Claim(s) <u>1-32 and 72-103</u> is/are pending in the	e application	
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-32 and 72-103</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	r election requirement.	
Application Papers		
9)⊠ The specification is objected to by the Examine	r.	
10) The drawing(s) filed on is/are: a) □ accept	oted or b) objected to by the Ex	aminer.
Applicant may not request that any objection to the		• •
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Ex	aminer.	
Priority under 35 U.S.C. §§ 119 and 120	a mai a aite a constant O.F. I.I. O. O. F. 4400	(-) (-1) (0)
13) Acknowledgment is made of a claim for foreign	i priority under 35 U.S.C. § 119(	a)-(d) or (t).
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents	o have been received	
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>		
application from the International Bu  * See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	· ·
14) Acknowledgment is made of a claim for domesti	c priority under 35 U.S.C. § 119	(e) (to a provisional application).
<ul> <li>a) ☐ The translation of the foreign language pro</li> <li>15)☐ Acknowledgment is made of a claim for domesting</li> </ul>		
Attachment(s)		
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	ry (PTO-413) Paper No(s) I Patent Application (PTO-152)

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)

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#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/03/03 has been entered.

### **Specification**

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Method of Fabricating a Coil and Clamp for Variable Reluctance Transducer.

#### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 1-32 and 72-101 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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In Claim 1, the recitation of "said dicing step disconnects mechanical connection between adjacent coils" (lines 9-10) is new matter. The specification, as originally filed, does not provide support for any feature of a dicing step that disconnects a mechanical connection between adjacent coils. The specification does not even define what is meant by the limitation of a "mechanical connection".

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 1-32 and 72-101 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1, it is unclear from the disclosure what is meant by the phrase, or what is even encompassed by the phrase of a "mechanical connection". How is the electronic device mechanically connected?

NOTE: No art rejections have been applied to Claims 1-32 and 72-101 since there are a great deal of confusion and uncertainty as to the proper interpretation of the limitations of claims. Therefore, it would not be proper to reject such claims on the basis of prior art. See MPEP 2173.06.

# Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 103 is rejected under 35 U.S.C. 102(b) as being anticipated by Person et al 5,986,533.

Person discloses a method of making an electronic device comprising: providing an overall coil conductor (shown in Fig. 3E), an insulation (dielectric layer 72), a tube (either cap 12 or 13); forming openings (via holes 39, 49) in portions of the insulation 72 (in Fig. 3C) and exposing the conductors of the coil (shown in Fig. 3E) for contacts; dicing through the coil at cut marks 112 to provide a plurality of short coils where each coil has at least one opening in the insulation 72 (see col. 6, lines 7-13); and providing a movable core (shown in Fig. 1) within the tube (12 or 13) being capable of adjusting the inductance of the coil.

#### Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 102 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al 5,265,329 in view of Person et al.

Jones discloses a method of fabricating an electronic device comprising: providing a substrate 12; surface mounting a component (anyone of 30 or 44) to the substrate 12; mounting additional electronics (conductive pads 14) on the substrate; connecting the additional electronics

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14 to the component or anyone of the components 30, 44; and providing a housing 20 capable of holding anyone of the components, the substrate and the additional electronics (shown in Fig. 1).

Jones further teaches that anyone of the components can be an inductor (see col. 3, lines 22-26) that is surface mounted to the substrate. However, Jones does not teach the specific steps of a), b) or c) for the component.

Person teaches a component making process including steps a), b) and c) comprising: providing an overall coil conductor (shown in Fig. 3E), an insulation (dielectric layer 72), a tube (either cap 12 or 13); forming openings (via holes 39, 49) in portions of the insulation 72 (in Fig. 3C) and exposing the conductors of the coil (shown in Fig. 3E) for contacts; dicing through the coil at cut marks 112 to provide a plurality of short coils where each coil has at least one opening in the insulation 72 (see col. 6, lines 7-13). The component making process of Person is to manufacture a plurality of components, each component being an inductor including at least one coil, for the advantages of making a plurality of components smaller in parts and more economical (see col. 1, lines 35-44). Such components of inductors are to be subsequently surface mounted to a substrate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Jones by including the component making process Person, to advantageously manufacture a plurality of components much smaller in parts and more economical, and for the purpose of subsequently surface mounting the components to a substrate.

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## Response to Arguments

11. Applicant's arguments with respect to Claims 1-32 and 72-103 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday Friday 9:00 am 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3590 for regular communications and 703-305-3588 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Dexter Tugbang

Primary Examiner

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April 7, 2003